CORRELATION OF THE FREQUENCY OF CHILDHOOD TRAUMA WITH DEPRESSION AND ANXIETY IN MIDWIFERY STUDENTS

EBELİK ÖĞRENCİLERİNDE ÇOCUKLUK ÇAĞI RUHSAL TRAVMA SIKLIĞININ DEPRESYON VE ANKSİYETE İLE İLİŞKİSİ

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Öz

Amaç: Bu çalışma, ebelik öğrencilerinde, çocukluk çağı ruhsal travmaları sıklığının ortaya konması, depresyon ve anksiyete ilişkilerinin araştırılarak karşılaştırılmasını amaçlamıştır. Gereç ve Yöntem: Mardin Artuklu Üniversitesi Sağlık Yüksekokulu Ebelik Bölümünde öğrenim gören öğrencilerin, çocukluk çağı ve adölesan dönemlerinde istismar ve ihmal yaşantıları öz bildirimlerine dayalı olarak değerlendirildi. Çocukluk çağı yaşantıları, çocukluk çağı ruhsal travmaları ölçeği (CTQ) ile anksiyete ve depresyon ilişkileri Beck anksiyete ölçeği ve Beck depresyon ölçeği ile değerlendirildi. Bulgular: Duygusal ihmal ve fiziksel ihmalin ortalama puanı sırasıyla 9,0±3,9 ve 7,1±2,5'tir, duygusal istismar ve cinsel istismarın puanı sırasıyla 7,1±2,8 ve 5,9±2,2'dir. Ve fiziksel istismarın ortalama puanı 5,4 ± 1,4 idi. CTQ toplamı puanları, depresyon ve anksiyete ile anlamlı bir şekilde ilişkili olduğu görüldü. Tartışma: Çocukluk dönemi psikolojik travmaları ve duygusal istismar, bireylerin depresyon ve anksiyeteye yatkın olmasına neden olan tutumların gelişiminde etkili olabilir. Çocukluk çağında en sık görülen travmalardan biri olan duygusal istismar, göz ardı edilmemesi gereken bir travma türüdür ve klinik uygulamada doğru bir şekilde ele alınmalıdır. Erken travmalar, yetişkinlikte görülen psikolojik ve davranışsal sorunlarla bağlantılı olabilir.

Anahtar Kelimeler

Çocukluk Çağı Travması; Çocukluk Çağı Ruhsal Travma Ölçeği; Beck Anksiyete Ölçeği; Beck Depresyon Ölçeği; Ebelik Öğrencileri

Abstract

Aim: This study aims to analyze the frequency of childhood traumatic events and its correlation with depression and anxiety cases among midwifery students. Material and Method: The study was based on student self-reports concerning abuse and negligence experiences during their childhood and adolescence, evaluated using the Childhood Trauma Questionnaire (CTQ). The correlation with depression and anxiety was assessed using the Beck Depression Inventory and the Beck Anxiety Inventory. Results: The average scores of emotional neglect and physical neglect were 9.0±3.9 and 7.1±2.5 respectively. The average scores of emotional abuse and sexual abuse were 7.1±2.8 and 5.9±2.2 respectively. The average score of physical abuse was 5.4±1.4. The CTQ total points were significantly associated with depression and anxiety. Discussion: Childhood psychological traumas and emotional abuse may lead to the development of dysfunctional attitudes, causing individuals to be prone to depression and anxiety. Emotional abuse, which is one of the most common traumas in childhood, is a type of trauma that should not be ignored and that should be handled properly in clinical practice. Early traumas may be linked to psychological and behavioural problems in adult life.

Keywords

Childhood Trauma; Childhood Trauma Questionnaire; Beck Anxiety Inventory; Beck Depression Inventory; Midwifery Students

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Introduction

Traumas are defined as experiences that are threatening or damaging to the physical integrity of the person. The primary events causing psychological and physical trauma are wars, conflicts, violence induced by officials, violence induced by armed groups, political violence, torture, non-political violence, domestic violence particularly against children and women, domestic or non-domestic sexual assault and abuse, violence induced by individuals/groups against adverse parties, oppression and violence induced into communities, and traffic accidents, work accidents, fires, and other natural disasters. A history of childhood trauma is known to be correlated with a myriad of psychiatric disorders and is accepted as a risk factor for disease development. A positive correlation has been found between childhood trauma history and a wide range of psychiatric disorders such as dissociative disorders, anxiety disorders, post-traumatic stress disorder, borderline personality disorder, somatisation disorders, antisocial personality disorder, alcohol and substance abuse, depression, conversion disorder, avoidant personality disorder, psychotic disorders, and obsessive-compulsive disorders [1]. Childhood exposure to interpersonal traumatic stressors has been shown to be extremely common and has been described as a silent epidemic. One study estimated that, worldwide, approximately one-third of children experience physical abuse, while approximately one in four girls and one in five boys experience sexual victimization [2]. It is understood that violence against children is a global issue. Despite multiple years in which physical and sexual maltreatment and assault of children have decreased in the United States, national survey data have continued to indicate notable 1-year prevalence rates of 4.2% for physical abuse, 49.6% for any type of physical assault, 4.2% for sexual abuse, and 3.2% for sexual assault [3]. In Turkey-wide studies on violence against women, the South-Eastern Anatolian region ranked second after Central Anatolia in terms of frequency of violence (47.7% physical and 19.7% sexual) [4]. Having nightmares, wetting the bed, being an introvert, and being aggressive against their mother and/or other children are common effects seen in children whose mother has experienced violence [5]. Also, there is substantial evidence that women with child abuse histories experience poorer physical health in respiratory, gastrointestinal, musculoskeletal, neurological, and gynecological categories and that they utilize health services at relatively higher rates than women who have not been victimized [6]. The cause and how it started, considering true life experiences and the trauma reality that the violence created on its own, the female students were studied to evaluate the association with the pathology that was parallel to childhood abuse and negligence. This evaluation was conducted with the students who may have been present in violent environments and had a risk of experiencing violence by assessing their life experiences in an early retrospective. Various types of childhood trauma have been demonstrated to be associated with anxiety and depressive symptom severity [7]. Furthermore, the present study seeks to clarify the correlation between childhood trauma/negligence and depression/anxiety disorders among female children.

Table 1. Childhood trauma questionnare scalerelates Beck anxiety and Beck depression inventery point

	Anxiety (n=203)		Depression (n=203)	
	t	p	t	p
Emotional neglect	.05	.950	0.55	.580
Emotional abuse	3.86	.000**	3.73	.000**
Sexual abuse	1.44	.150	1.73	.080
Physical neglect	.97	.330	-0.96	.330
Physical abuse	-2.95	.003*	-2.33	.020*
Minimisation	-1.32	.180	-2.24	.020*
CTQ	3.80	.000**	3.65	.000**

*: p<.050; **:p<.001

Material and Method

The study was conducted as descriptive, cross-sectional epidemiological research in the School of Health, Mardin Artuklu University between April 7-11, 2014, in Mardin in the southeast of Turkey. All the study participants were midwifery students at the School of Health, Mardin Artuklu University (N=211). After obtaining the university's consent, legal permission was obtained from the relevant institutions to conduct the study. The research began after receiving the approval from the Ethics Committee. The purpose of the study and their ethical rights was described to students, and then questionnaires were delivered to students who voluntarily agreed to participate. Eight students did not reply to the questionnaires at all. Thus, a total of 203 students (96.2% of the entire population) participated in the survey and their authorized ethic agreements, with signatures, were collected.

Childhood Trauma Questionnaire (CTQ): This assessment tool developed by Bernstein et al. [8] was translated from its original language into Turkish by Prof. Dr. Vedat Şar and then finalized [9]. The questionnaire consists of a total of 28 questions. This questionnaire yields five sub-scores addressing sexual, physical, and emotional abuse as well as emotional and physical negligence during childhood. Answer options are (1) never, (2) rarely, (3) sometimes, (4) often, and (5) very often. Before calculating CTQ scores, the scores from positive statements (items 2, 5, 7, 13, 19, 26, 28) are inverted (e.g. 1->5, 2->4). The sum of five sub-scores yields the overall CTQ score. Thus, while the sub-score range is 5-25, the overall score range is 25-125. Note that the scores of items addressing minimization (items 10, 16 and 22) need not be inverted; because these three items only measure trauma denial they have no contribution to the overall score. To calculate the minimization score, only 5 points (highest score) from each of these three items are taken into account and each is counted as 1 point. By summing them, a minimization score between 0 and 3 is obtained. Emotional abuse is addressed by items 3, 8, 14, 18, 25; physical abuse is addressed by items 9, 11, 12, 15, 17; physical neglect is addressed by items 1, 4, 6, 2, 26; emotional neglect is addressed by items 5, 7, 13, 19, 28; and sexual abuse is addressed by items 20, 21, 23, 24, 27. Findings of this questionnaire suggest that a score above 5 for sexual and physical abuse—that is, the presence of a yes answer, regardless of the level, for any question—should be taken as a positive feedback. It is understood that this limit may increase to the level of 7 points for emotional abuse and 12 points for emotional neglect. It is evident that such limit may be around 35 for the total score [9]. High scores point to the

abundance of childhood trauma experiences and to the severity of the violence [10].

Beck Depression Inventory (BDI): This is an inventory consisting of 21 items that measure physical, emotional, cognitive, and motivational signs of depression. Each question is scored on a scale of 0-3, and an overall score of 17 or above signifies depression requiring clinical attention. The score range is 0-63. Developed by Beck et al. in 1961 [11], the inventory was reviewed subsequently by Beck [12]. Then Hisli adapted the inventory to Turkey in 1988 and reassessed its validity and reliability [13].

Beck Anxiety Inventory (BAI): This inventory was developed by Beck et al. The inventory consists of 21 items aimed at measuring the severity of individual anxiety signs on a Likert-type scale of 0-4 (ranging between "none" and "severe"). The inventory queries subjective anxiety and physical signs. Inventory items measure the presence and severity of typical anxiety signs over the previous week. The score range is 0-63. Higher overall scores from the inventory indicate the severity of the anxiety experienced by the individual [12]. A validity and reliability study of the inventory in Turkey was conducted by Ulusoy [14].

Analysis was performed using SPSS 16.0 for Windows. In the analyses, scores calculated based on the Childhood Trauma Questionnaire, depression, and anxiety section, Beck Depression Inventory and Beck Anxiety Inventory were regarded as individual result variables. Variance and chi-square analyses were employed to query any difference across measuring methods applied to the study group. We evaluated anxiety and depression scores as a dependent variable, and we analyzed emotional abuse, physical abuse, physical neglect, emotional neglect, and sexual abuse and CTQ total scores as independent variables. Percent and mean values were used in descriptions. P<0.05 was judged as statistical significance.

Results

The average student age was 21.4±1.9, the average score of the Childhood Trauma Questionnaire was 35.8±9.1, the average score of the Beck Depression Inventory was 13.7±10.4, and the average score of the Beck Anxiety Inventory was 19.8±12.7. Average scores of emotional neglect and physical neglect were 9.0±3.9 and 7.1±2.5, respectively; average scores of emotional abuse and sexual abuse were7.1±2.8 and 5.9±2.2 respectively; and the average score of physical abuse was 5.4±1.4. Of the overall positive feedback (N=75) of 36.6% to the Childhood Trauma Questionnaire, emotional abuse (N=65) accounted for 31.7%, physical abuse (N=35) for 17.1%, physical neglect (N=47) for 22.9%, emotional neglect (N=47) for 22.8%, and sexual abuse (N=48) for 23.4%. The study further revealed low (N=55) 26.8%, average (N=56) 27.3%, and severe (N=60) 29.4% anxiety, and (N=64) 31.2% depression requiring clinical attention. With regard to sexual assault, one student stated "often," one student stated "sometimes," and three students stated "rare" (total N=5) constituting a total sexual abuse feedback of 2.4%. Emotional abuse was statistically significantly related to anxiety and depression (p=0.000). Physical abuse was statistically significantly related to anxiety (p=0.003) and depression (p=0.02) (Table1). CTQ scores were high and significant (p=0.005), sexual abuse (p=0.009) and physical abuse (p=0.025) were statistically significant in sexual assaults (Table 2). Positive feedback of childhood trauma total scores were significantly associated with anxiety (p=0.000) and depression (p=0.001). Positive feedback of physical neglect was significantly associated with anxiety (p=0.017) and depression (p=0.016). Positive feedback of depression was significantly associated with anxiety (p=0.000) (Table 3). In sexual assault, cases were associated with positive feedback of physical abuse (p=0.002) and positive feedback with emotional abuse (p=0.018). Also, positive feedback of childhood trauma total scores (p=0.033) and positive feedback of sexual abuse (p=0.001) were statistically significant in the sexual assault cases.

Discussion

Emotional abuse was described as excessive verbal intimidation, mocking, or humiliating criticisms and comments made

Table 2. Childhood trauma questionnare scalerelates with sexuel abuse

	t	p
Emotional neglect	1.73	.080
Emotional abuse	-0.64	.940
Sexual abuse	2.64	.009*
Physical neglect	0.52	.600
Physical abuse	2.26	.025*
Total CTQ	2.86	0.005*
Anxiety	-1.28	0.200
Depression	-.60	0.540

*: p<.050; **:p<.001

Table 3.Positive feedback childhood trauma questionnare scalerelates with positive feedback Beck anxiety and Beck depression inventery points

	Anxiety (n/%)			P	Depression(n/%)		P
	Mild	Moderate	Severe		Clinic attention(-)	Clinic attention(+)	
Emotional abuse	84/60.9	24/17.4	30/21.7	.000**	105/76.1	33/23.9	.001**
(+)	21/32.3	12/18.5	32/49.2		34/52.3	31/47.7	
Physical abuse	91/54.2	28/16.7	49/29.2	.308	121/72.0	47/28.0	.017*
(+)	14/40.0	8/22.9	13/37.1		18/51.4	17/48.6	
Physical neglect	78/59.1	20/15.2	34/25.8	.017*	98/74.2	34/25.8	.016*
(+)	27/38.0	16/22.5	28/39.4		41/57.7	30/42.3	
Emotional neglect	89/57.1	26/16.7	41/26.3	.017*	111/59.6	45/28.8	.134
(+)	16/34.0	10/21.3	21/44.7		28/59.6	19/40.4	
Sexual abuse	87/56.1	26/16.8	42/27.1	0.069	113/72.9	42/27.1	.015*
(+)	18/37.5	10/20.8	20/41.7		26/54.2	22/45.8	
CTQ	80/62.5	20/15.6	28/21.9	.000**	99/77.3	29/22.7	.000**
(+)	25/33.3	16/21.3	34/45.3		40/53.3	35/46.7	
Depression	85/61.2	26/18.7	28/20.1	.000**			
(+)	20/31.2	10/15.6	34/53.1				

*: p<.050; **:p<.001

by the guardians of the child that would endanger the emotional or psychological health of the child [15]. Studies on child abuse in our country reveal that emotional abuse (78%) was ranked at the top.¬ Other studies report that emotional abuse was ranked top for frequency followed by physical and sexual abuse.¬ Studies in Hatay and Ankara further report frequent emotional abuse [16, 17]. The studies further show that, of the children aged between 7-18 living in Turkey, 56% witness physical abuse, 49% witness emotional abuse, and 10% witness sexual abuse [18]. Our study has revealed that the frequency of emotional and sexual abuse and physical and emotional neglect was high, yet below the average of overall Turkey scores. It may be argued that these results are understated. Even when studies are conducted with anonymous subjects, in our country, where it is perceived that any form of violence should be kept secret or would create shame if disclosed, revealing violence is difficult and the burden of the violence is often carried by the victim secretly.

Childhood abuses were correlated with subsequent development of progressive psychiatric disorders. Our findings support the current literature arguing that such abuses should be researched as a risk factor, particularly for mood and anxiety disorders [17]. Emotional abuse with positive feedback and depression that requires clinical attention was found to be accompanied by findings showing average and severe levels of anxiety. 50-60% of adults with major depressive disorder history have a history of one or more anxiety disorders in their lifetimes. Patients who consult to primary health centres with a major depressive disorder diagnosis have a concomitant anxiety disorder of 70%. 65% of the patients with major depressive disorder diagnosis have moderate anxiety symptoms and 20-25% of them have severe anxiety symptoms [19]. Looking at the emotional, physical, and sexual abuse sub-scales of the Childhood Trauma Questionnaire conducted among individuals with a history of emotional abuse and neglect, traces of childhood traumas were found to be underlying such disorders [20]. We recommend that childhood traumas and abuses, along with medical diseases, should be treated as a serious problem requiring attention.

Despite the frequency of sexual abuse occurring in social life, it is usually kept secret and only 5-10% of the incidences are disclosed. 90% of these acts are committed by a person familiar to the child [21]. A study by Meyerson et al. reveals that the incidence of sexual trauma is higher in female children [22]. Also, another study conducted with a group of college students in Hong Kong reveals higher incidence of sexual trauma in female children [23]. In this respect, since violence against women has been more intense throughout history, our study focuses on female students. However, we would like to remind the reader that each member of a society may be exposed to violence. A sexual assault in Van supports this finding. Of 8 victims of a sexual abuse in the incident, 5 (62.5%) were male and 3 (37.5%) were female [24]. Research reveals it is mostly children aged3-5 who are exposed to sexual abuse [21]. However, the records of the Forensic Medicine Department of Çorum reveal 11 sexual abuse incidents against minor children where 9(81.8%) of the victims were female, 4 (45.4%) were age 15, 2(18.18%) were age16, and there was one victim at each of the ages of 7, 8, 11, and 14 [25]. Another study in Hatay reveals that female children were exposed to sexual violence at higher rates [26]. And our study reveals a rate of 23.4% for sexual abuses with positive feedback and 2.4% for sexual assaults with positive feedback. A student reporting the frequency of abuse as "often" in the study requires consideration. The fact that total scores of physical abuse with positive feedback, emotional abuse with positive feedback, sexual abuse with positive feedback, and childhood traumas with positive feedback among the students who were the victims of sexual assault are high and statistically significant reveals that violence is a multifaceted phenomenon and persistently engulfs the victim.

This is a very hard and heavy load for a child to carry. Assessments were conducted, by means of CTQ, in Turkish populations known to have higher incidence of childhood trauma. For example, while average CTQ scores of schizophrenic patients displaying dissociative signs is at a range of 50.0-52.2, it is 38.3-41.5 for patients not displaying any dissociative sign. Among university students satisfying the criteria of borderline personality disorder, the total CTQ score was found to be 40.6 for individuals co-diagnosed with dissociative disorder, compared to 37.1 for the others. In university students who do not display any of these disorders, the average was found to be 32.9. On the other hand, for a Dutch population, the corresponding average was found to be 50.9 for the clinical group and 23.5 for the non-clinical group. For a university student population in North America, the average was found to be 36.8-37.8 for female and 35.4-37.9 for male students while it was found to be 32.1 for female and 34.5 for male university students in Turkey. The study by Şar et al. reveals a score of 61.3 in the dissociative disorder group, 44.3 in family members, and 36.1 in the non-clinical group [9]. Furthermore, the average score was found to be 62.4 in a study by Zeren et al., 64.2 in a study by Aslan and Alparslan, 71.5 in a study by Özen et al., and 100.6 in a study by Bostancı et al. [16]. The average score of 35.8 yielded by our study was consistent with the non-clinical group.¬¬ Correlation between "the total scores of childhood traumas with positive feedback" and "anxiety and depression inventories with positive feedback" was interpreted to suggest unfavourable conditions and problems related to the childhood abuse experiences.

Regarding possible limitations of these studies, it should first be noted that the sample sizes of the study referencedin this article were medium. Our research group consisted solely of midwifery students, but this group may not be generalizable to the overall adolescent population. Also, our study was cross-sectional research, which does not permit assessment of temporal and thus potentially causal relations. However, this was the first research exploring the childhood traumas of Mardin city's female adolescents and any corresponding illness with anxiety and depression. Secondly, the outcomes reported were largely based on self-report symptomatology instead of clinical interview diagnosis and retrospective assessment. At the end of the study, it was considered that face-to-face contact would be more effective. However, it was found that items in the questionnaire revealed secret conditions that would not likely have been disclosed by the victims in a face-to-face situation. It was further found that studies conducted without asking the identity of the subjects to detect past trauma in detail can turn out

to be more effective because the subjects are more comfortable with disclosure. Although there is no one-to-one question about sexual assault, five students wrote about their sexual assault events. In fact, childhood traumas, including psychological traumas, are still being ignored in our country. For this reason, training and seminars should be planned. Children and adolescents need to have their rights explained to them.

Studies have shown that each gender and age group of society is exposed to risk of violence, although the type, frequency, and severity of the risk varies. Besides resulting in physical injuries, violence against children also harms their cognitive, behavioural, social, and emotional functions [27]. Violence and its associated factors are complex and multidimensional. The Childhood Trauma Questionnaire employed in the present study has been found to be significant for its capability to reveal such violence. The high associated scores of anxiety and depression indicate that childhood violence is a public health issue that may be accompanied by potential pathologies. In our study, childhood traumas provided a basis for depression and anxiety disorders in adulthood. Childhood psychological traumas, particularly emotional abuse, may lead to the development of dysfunctional attitudes, causing individuals to be prone to depression and anxiety. Emotional abuse, one of the most common traumas in childhood, is a type of trauma that should not be ignored and that should be handled properly in clinical practice. This idea is supported by these results; a growing body of evidence suggests that the developing brain organizes in response to the pattern, intensity, and nature of sensory, perceptual, and affective experience of events during childhood. Threat activates the brain's stress-response neurobiology. This activation, in turn, can affect the development of the brain. These results could indicate that previously-experienced emotional and physical traumas can lead to later symptoms of anxiety and depression. In fact, these pathological conditions can be viewed as an expected result of the trauma, because the developing brain is exquisitely sensitive to stress [28]. In this respect, it may be argued that the adverse behaviours occurring within the family may lead to adverse impacts on all family members; however, children and women are particularly vulnerable. In cases diagnosed with depressive disorder and anxiety, it is appropriate to examine the familial and social relationships as well. If we want individuals and society to be healthy, we have to protect our own and our children's psychological health. All of the effects of early traumas may not appear immediately, but they are likely to arise in the future. We see the results of physical traumas on our bodies, but what about our breakable souls? And, ultimately, which are the more damaging traumas?

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Competing interests

The authors declare that they have no competing interests.

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